

A Land Conservation Plan for the Merrimack Watershed of NH and MA

Presentation to
2014 NH Water & Watershed Conference
Plymouth State University
March 21, 2014

What is it?

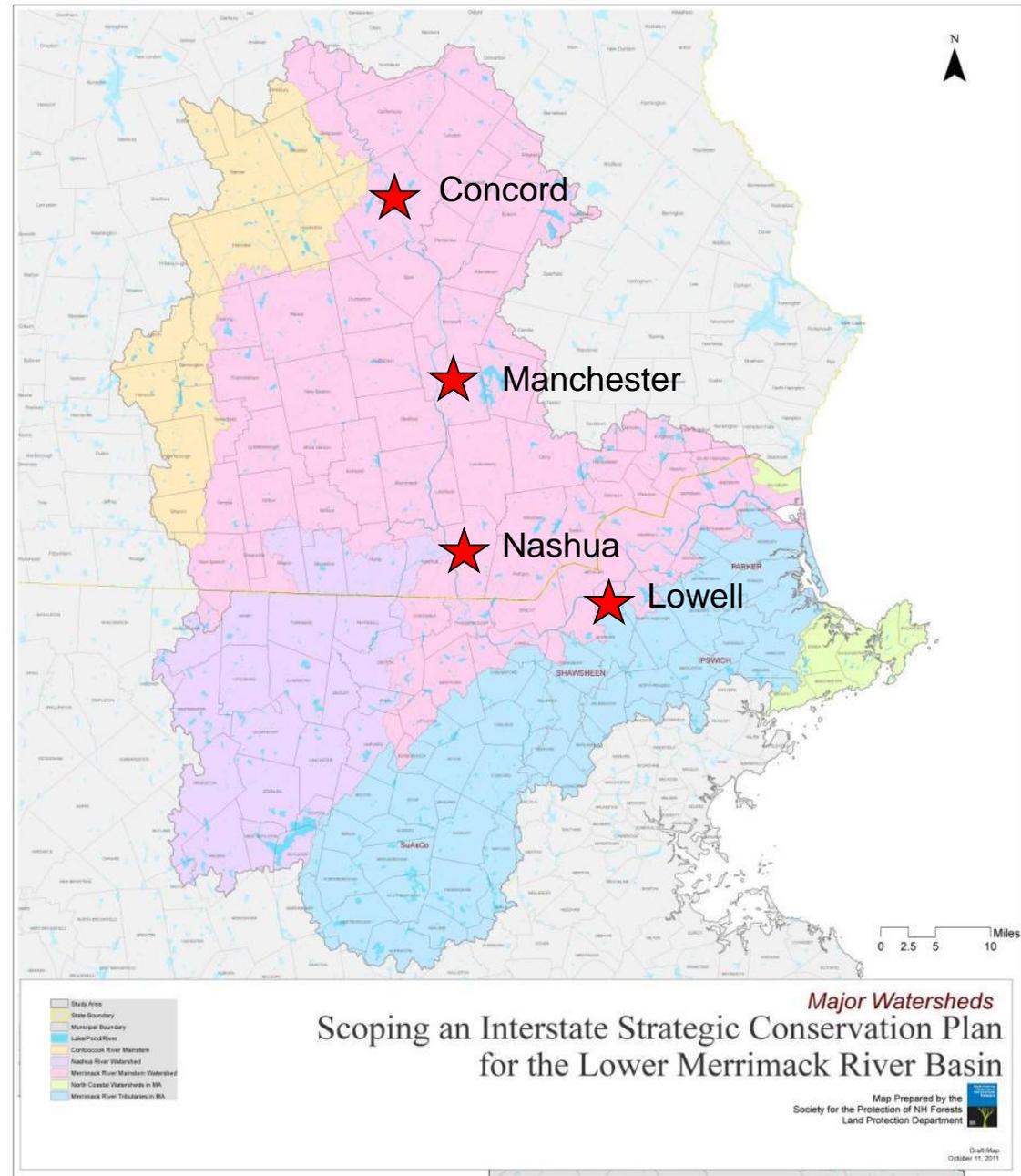
- * A new science-driven, consensus land conservation plan for the Merrimack watershed.
- * Product of two years of effort by conservation and planning professionals representing 33 private organizations and public agencies in NH and MA.
- * Integrates best-available natural resource data with expert judgment to prioritize land protection to protect *water quality*, habitat, farms and forests, and recreational open space.

When will it be Released?

- * Organizational support provided by the Society for the Protection of New Hampshire Forests (Forest Society), the state's oldest and largest private conservation organization.
- * Data analysis and focus area mapping completed December 2013.
- * Report and final maps being finalized now. Public release in April-May.

Why the Merrimack?

- Merrimack watershed totals about 3,275 square miles or 2.1 million acres, divided almost evenly between NH (54%) and MA (46%).
- From its start in Franklin, the Merrimack River flows through eight of the New Hampshire's ten largest cities, including Manchester, Nashua and Concord.
- River continues into MA, running through cities like Lowell and Lawrence to its mouth at Newburyport.



Why the Merrimack?

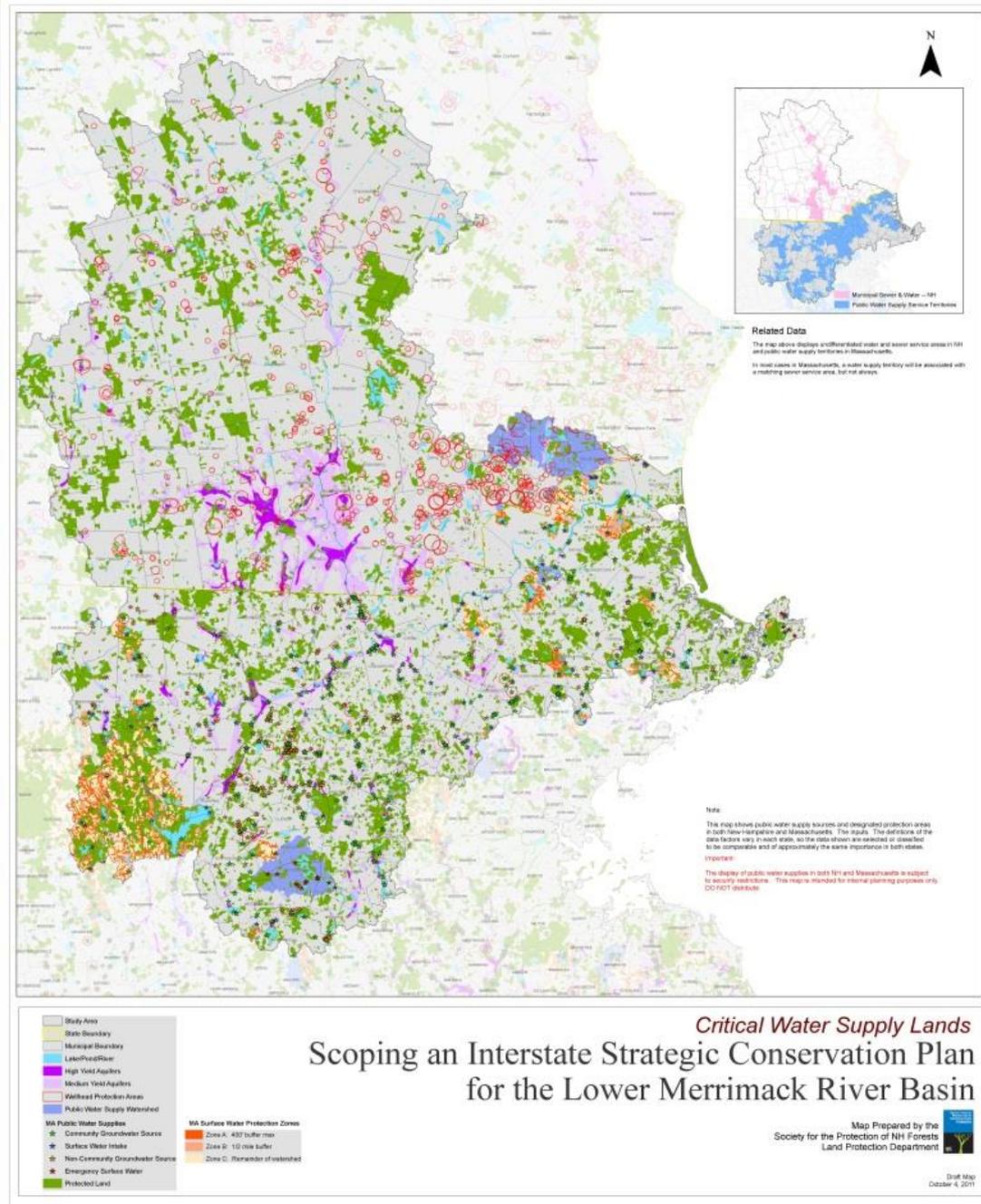
- * The region's 2.1 million residents directly depend on the Merrimack watershed for drinking water, local food and forest products, and close-to-home outdoor recreation.
- * Despite being highly developed, the Merrimack Valley still contains critical terrestrial and aquatic habitats, and contributes to the larger Gulf of Maine marine ecosystem.
- * In 2010 the Merrimack was identified by the US Forest Service as *the most threatened watershed in the nation* in terms of projected loss of private forest land over the next twenty years.

Current status of Conservation in the Watershed

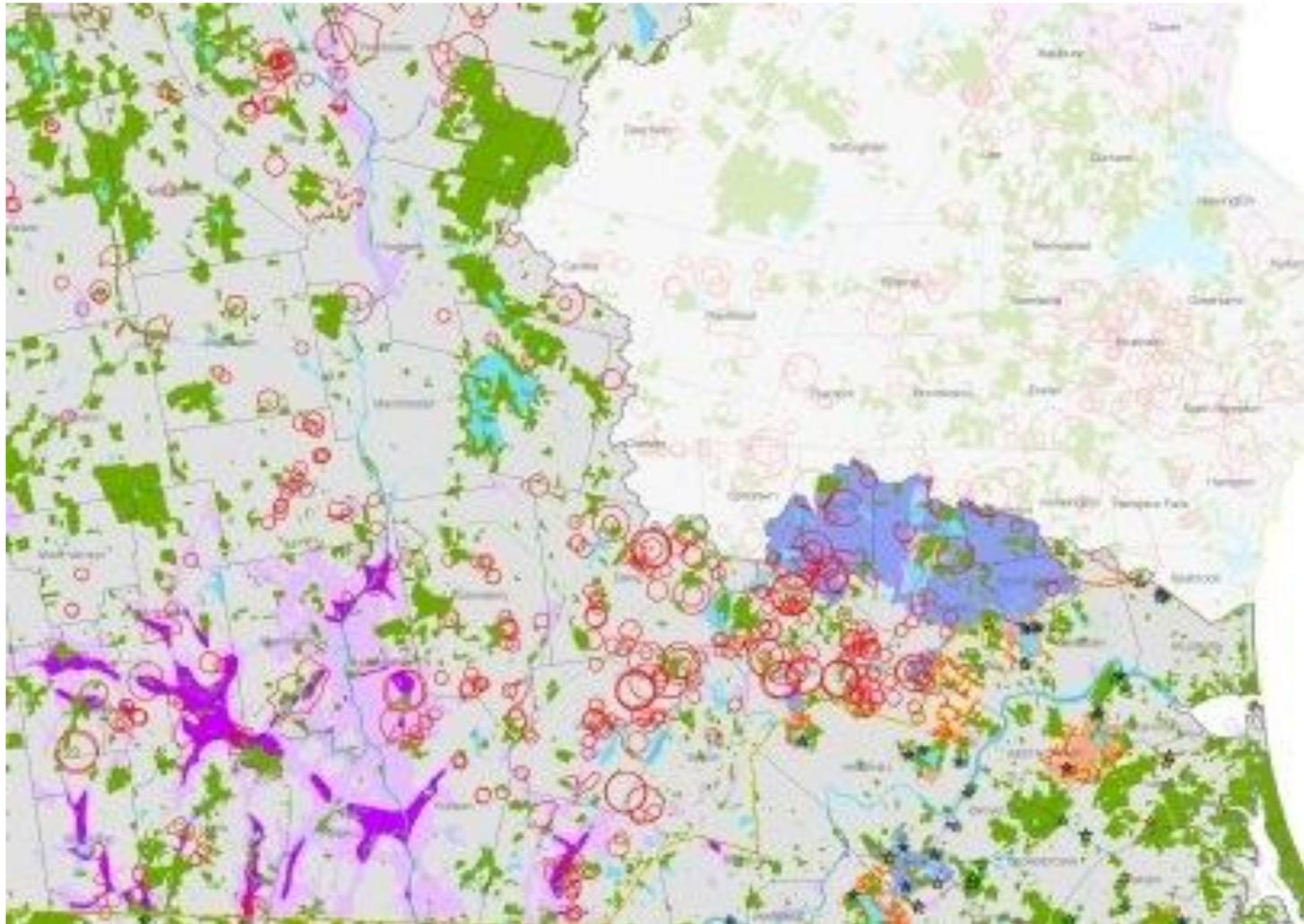
- * 22% of all Massachusetts residents live in the MA portion of the Merrimack watershed, but the region only has 17% of the state's conservation land.
- * HALF of all New Hampshire residents live in NH portion of the Merrimack watershed, which has only 10% of state's conservation land.

Watershed Conservation

- 18.5% of the Merrimack watershed is permanently conserved -- less than the share for New Hampshire as a whole (30.6%) or Massachusetts (24.5%).
- In NH, only 12% of all the land classified as “drinking water protection area” is in permanent conservation.
- In MA, 18% of the land classified as “source water protection area” by state regulators is in permanent conservation.



Watershed Conservation

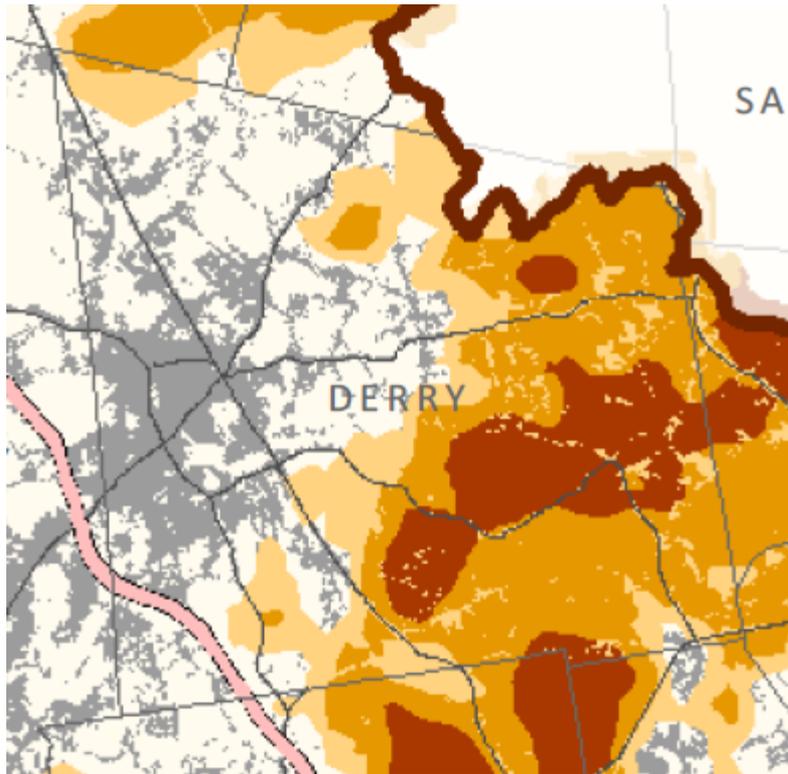


The Merrimack Plan and Water

- The Merrimack conservation plan integrates **43** different GIS data sets;
- Of these **15 were water-related**, including drinking water and source water protection areas, aquifers, phosphorus and nitrogen loading data, wetlands, stream networks etc.
- Each data set was weighted via “Delphi” voting (18 partners participated)
- Water-related data is a key driver of the plan.

New Hampshire Data Factor	Mean Value
Source water protection areas	6.5
Drinking water protection areas (community wellheads)	5.7
WAP Tier 1: Best in State	5.4
Prime 1, 2, & 3 soils combined	5.0
Unprotected gaps in existing rail trails	5.0
Resilience: Highest from All Perspectives	4.6
WAP Tier 2: Best in Bio-Region	3.9
Unprotected gaps in existing hiking trails	3.9
Blocks 50 - 500 acres	3.4
Blocks > 5,000 acres	3.4
Prime agricultural soils & soils of statewide significance	3.4
Phosphorus Loading (best 1/3)	3.1
Phosphorus Loading (middle 1/3)	3.1
1/4 mile NHDES designated buffer	2.9

Example: Derry, NH



	Town acres in Watershed	Tier Acres	Tier acres as % of Town	Tier acres Conserv ed	% of Tier acres	Tier acres Not Conserv ed	% of Tier acres
Tier 1	22,731	2,628	11.6%	467	17.8%	2,162	82.2%
Tier 2	22,731	5,354	23.6%	508	9.5%	4,846	90.5%
Tier 3	22,731	4,091	18.0%	320	7.8%	3,771	92.2%
	22,731	12,073	53.1%	1,295	10.7%	10,778	89.3%